

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions or listings of claims for this application.

Listing of Claims:

Claims 1-20 (Canceled).

1 ~~21~~. (Previously presented) A method for analyzing a plurality of amino acids in a fluid sample comprising the steps of:

introducing said sample into a buffer solution;

passing said sample in said buffer solution through a separation column; and

setting a lithium ion concentration in said buffer to no more than 0.3 mols/L until approximately a time when β -aminoisobutyric acid (β -AiBA) is eluted.

2 ~~22~~. (Original) The method of claim ~~21~~ further comprising setting a pH to no more than 3.5 for said buffer solution up to a time before said β -aminoisobutyric acid (β -AiBA) is eluted.

3 ~~23~~. (Original) The method of claim ~~21~~ further comprising setting said lithium ion concentration and a pH in said buffer solution to increase in a gradient fashion within a time of eluting from γ -amino-n-butyric acid (γ -ABA) to hydroxylysine (Hyls).

5 ~~24~~. (Previously presented) A method for analyzing a plurality of amino acids in a fluid sample comprising the steps of:

introducing said sample into a buffer solution;

passing said sample in said buffer solution through a separation column;

setting a lithium ion concentration in said buffer to no more than 0.3 mols/L up to a time before β -aminoisobutyric acid (β -AiBA) is eluted;

setting said lithium ion concentration and a pH in said buffer solution to increase in a gradient fashion within a time of eluting from γ -amino-n-butyric acid (γ -ABA) to hydroxylysine (Hyls); and

setting said lithium ion concentration to increase from 0.44 mols/L to 1.00 mol/L and said pH to increase from 3.66 to 4.1 in said buffer solution.

6 ~~25~~. (Previously presented) A method for analyzing a plurality of amino acids in a fluid sample comprising the steps of:

introducing said sample into a buffer solution;

passing said sample in said buffer solution through a separation column;

setting a lithium ion concentration in said buffer to no more than 0.3 mols/L up to a

time before β -aminoisobutyric acid (β -AiBA) is eluted; and

setting said lithium ion concentration at 0.81 mols/L and a pH at 4.00 in said buffer solution within an elution time from hydroxylysine (Hyls) to histidine (His).

1 ~~26~~. (Original) The method of claim ⁴25 further comprising setting the lithium ion concentration at 1.00 mol/L and said pH at 4.1 in said buffer solution after the elution of histidine (His).

8 ~~27~~. (Previously presented) A method for analyzing a plurality of amino acids in a fluid sample comprising the steps of:

introducing said sample into a buffer solution;

passing said sample in said buffer solution through a separation column;

setting a lithium ion concentration in said buffer to no more than 0.3 mols/L up to a time before β -aminoisobutyric acid (β -AiBA) is eluted; and

setting a column temperature at 70°C within an elution time from valine (val) to homocitrulline (Hcit).

9 ~~28~~. (Previously presented) A method for analyzing a plurality of amino acids in a fluid sample comprising the steps of:

introducing said sample into a buffer solution;

passing said sample in said buffer solution through a separation column;

setting a lithium ion concentration in said buffer to no more than 0.3 mols/L
up to a time before β -aminoisobutyric acid (β -AiBA) is eluted; and

setting a column temperature at 70°C within an elution time of tyrosine (Tyr).

10 ~~29~~. (Previously presented) A method for analyzing a plurality of amino acids
in a fluid sample comprising the steps of:

introducing said sample into a buffer solution;

passing said sample in said buffer solution through a separation column;

setting a lithium ion concentration in said buffer to no more than 0.3 mols/L up to a
time before β -aminoisobutyric acid (β -AiBA) is eluted; and

setting a column temperature at 63°C within an elution time of from cysteine-
homocysteine mixed disulfides (Cys-Hcys) to tryptophane (Trp).

4 ~~30~~. (Previously presented) The method of claim ~~21~~¹ wherein said plurality of
amino acids is selected from the group comprising: phosphoserine (P-Ser), taurine
(Tau), phosphoethanolamine (PEA), urea (Urea), aspartic acid (Asp), hydroxyproline
(Hypro), methionine sulfoxide (MetSOX), threonine (Thr), Serine (Ser), asparagine

(AspNH₂), glutamic acid (Glu), glutamine (GluNH₂), Sarcosine (Sar), α -aminoadipic acid (α -AAA), proline (Pro), glycine (Gly), alanine (Ala), citrulline (Cit), α -amino-n-butyric acid (α -ABA), valine (Val), pipercolic acid (Pipeco), homocysteine (HCysH), methionine (Met), homocitrulline (HCit), allo-isoleucine (Allo-Ile), cystine (Cys), saccharopin (Saccha), isoleucine (Ile), leucine (Leu), tyrosine (Tyr), cystathionine (Cysthi), phenylalanine (Phe), allgininosuccinic acid (ASA), cysteine-homocysteine mixed disulfides (Cys-Hcys), β -alanine (β -Ala), aminolevulinic acid (ALeVA), β -aminoisobutyric acid (β -AiBA), γ -amino-n-butyric acid (γ -ABA), homocystine (HCys), alugininosuccinic acid anhydride 1 (ASA-Anhy1), ethanolamine (EOHNH₂), tryptophan (Trp), ammonia (NH₃), hydroxylysine (Hylys), aminoethylcysteine (AEC), ornithine (Orn), lysine (Lys), 1-methylhistidine (1Mehis), histidine (His), 3-methylhistidine (3Mehis), anserine (Ans), carnosine (Car) and arginine (Arg).

Claims 31-32 (Canceled).

11/23. (Previously presented) A method for analyzing a plurality of amino acids in a fluid sample comprising the steps of:

introducing said sample into a buffer solution;

passing said sample in said buffer solution through a separation column;

setting a pH to no more than 3.5 for said buffer solution up to a time before said β -aminoisobutyric acid (β -AiBA) is eluted; and

setting a lithium ion concentration in said buffer to no more than 0.3 mols/L until approximately a time when β -aminoisobutyric acid (β -AiBA) is eluted.